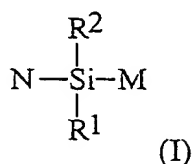


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## CLAIMS:

1. A compound having the following formula (I):



wherein M comprises a mass marker, N comprises a nucleic acid, and wherein  $\text{R}^1$  and  $\text{R}^2$  are each independently selected from a hydrogen atom, a halogen atom, a substituted or unsubstituted alkyl group, and a substituted or unsubstituted aryl group such that when the compound reacts with an electron donating moiety, either N or M cleaves from the Si atom in preference to  $\text{R}^1$  and  $\text{R}^2$ .

2. A compound according to claim 1, wherein  $\text{R}^1$  and  $\text{R}^2$  are each independently selected from fluorine, chlorine, bromine, iodine, methyl, ethyl, propyl, isopropyl, butyl, isobutyl, tert-butyl or phenyl groups.

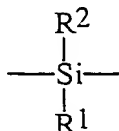
3. A compound according to claim 1 or claim 2, wherein N comprises a nucleotide or an oligonucleotide.

4. A compound according to claim 3, wherein the nucleotide or oligonucleotide is natural, or is modified by modifying a base, sugar and/or backbone of the nucleotide or oligonucleotide.

5. A compound according to any preceding claim, wherein the mass marker comprises a polyether.

6. A compound according to claim 5, wherein the polyether is a substituted or unsubstituted poly(arylether).
7. A compound according to claim 5 or claim 6, wherein the polyether comprises one or more fluorine atom substituents.
8. A compound according to any preceding claim, wherein the mass marker comprises a metal ion-binding moiety.
9. A compound according to claim 8, wherein the metal ion-binding moiety is a porphyrin, a crown ether, hexahistidine, or a multidentate ligand.
10. A compound according to claim 9, wherein the metal ion-binding moiety is a bidentate ligand or is EDTA.
11. A compound according to any of claims 8-10, wherein the metal ion-binding moiety is bound to a monovalent, divalent or trivalent metal ion.
12. A compound according to claim 11, wherein the metal ion is a transition metal ion, or a metal ion of group IA, IIA or IIIA of the periodic table.
13. A compound according to claim 12, wherein the metal ion is  $\text{Ni}^{2+}$ ,  $\text{Li}^{+}$ ,  $\text{Na}^{+}$ ,  $\text{K}^{+}$ ,  $\text{Mg}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ , or  $\text{Al}^{3+}$ .
14. A compound according to any preceding claim, wherein the electron donating moiety is a Lewis base.
15. A compound according to claim 14, wherein the Lewis base is selected from ammonia; a primary, secondary or tertiary amine; a compound containing a hydroxy group; an ether; and water.

16. A method for characterising an analyte, which method comprises:
- (a) providing a compound in which the analyte is attached by a cleavable linker to a reporter group relatable to the analyte, the linker having the following formula:



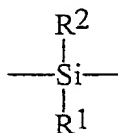
wherein R<sup>1</sup> and R<sup>2</sup> are substituents as defined in any of claims 1, 2, 14 and 15;

- (b) cleaving the reporter group from the analyte; and
- (c) identifying the reporter group, thereby characterising the analyte.
17. A method according to claim 16, wherein the reporter group is a mass marker identifiable by mass spectrometry.
18. A method according to claim 17, wherein the mass marker is as defined in any of claims 5-13.
19. A method according to any of claims 16-18, wherein the analyte is a nucleic acid.
20. A method according to claim 19, wherein the nucleic acid is as defined in claim 3 or claim 4.
21. A method according to any of claims 16-20, which method further comprises forming a compound as defined in any of claims 1-15, prior to identifying the reporter group.
22. A method according to any of claims 16-21, which method further comprises contacting the linker with an electron donating moiety to cleave off the reporter group.

23. A method according to claim 22, wherein the electron donating moiety is as defined in claim 14 or claim 15.

24. A method according to any of claims 16-23, wherein the reporter group is a mass marker and the method further comprises cleaving off the mass marker in a mass spectrometer.

25. Use of a linker group in the characterisation of an analyte, to attach a reporter group to the analyte, wherein the linker group is cleavable and has the following formula:



wherein R<sup>1</sup> and R<sup>2</sup> are substituents as defined in any of claims 1, 2, 14 and 15.

26. Use according to claim 25, wherein the analyte is a mass marker identifiable by mass spectrometry.

27. Use according to claim 26, wherein the mass marker is as defined in any of claims 5-13.

28. Use according to any of claims 25-27, wherein the analyte is a nucleic acid.

29. Use according to claim 28, wherein the nucleic acid is as defined in claim 3 or claim 4.

30. Use according to any of claims 25-29, wherein the mass marker forms part of a compound as defined in any of claims 1-15.